THE MINERAL INDUSTRY OF

BELGIUM AND LUXEMBOURG

By Staff¹

BELGIUM

Belgium benefited from the recovered world economic situation in 1994 and especially the improved economic situations of its fellow European Union (EU) member countries. As an export-oriented economy and an important minerals processor, the country's industry depended greatly on nondomestic markets, especially in the other EU countries, for many of its products. Not only did Belgium regain markets as a result of the worldwide economic recovery, but commodity prices on the international market for materials that have been traditional money earners rose as demand rose. In 1994, the Belgian gross domestic product (GDP) rose to the equivalent of \$227.5 billion, an increase of 2.3% from the previous year; the trade balance for Belgium and Luxembourg [the Belgian-Luxembourg Economic Union (BLEU)] was a positive \$6 billion.

Belgium relied on imported raw materials for the majority of its nonferrous metals processing sector. In 1993, the latest full year for which data were available, it became a net exporter of copper and lead, but it still, under normal conditions, needed to import refined metals to feed its semimanufacturing plants and was entirely reliant on imported raw materials to satisfy its needs for aluminum, nickel, and tin. Data for the complete year 1994 were not available to the U.S. Bureau of Mines (USBM), but, when available, they would probably show a scenario more consistent with the past than that of 1993, when the global recession caused a drop in some of the traditional export markets.

Government Policies and Programs

As one of the more socialized states, the Government of Belgium had some of the proportionally largest debts in Europe, with a GDP-to-debt ratio in 1994 of 138%, down slightly from 147% in 1993. The Government's expenses have traditionally, by mandate, included child allowances, health insurance, pensions, meal tickets, mandated vacations, and mandated cost-of-living increases, among others. One of the principle driving forces behind Belgian economic policy has been the desire to be in the vanguard of countries joining the planned Economic and Monetary Union (EMU) of the EU in 1999. In order to do this, however, Belgium must come to terms with its public finance crisis. A condition given in the Maastrict Treaty for joining the EMU was a GDP-to-debt

level of 60%. Proposals to achieve this level included curbing tax allowances on benefits (mainly pensions), holding down expenditures for health services, cutting defense spending, and reducing unemployment.

Environmental Issues

Environmental policy in Belgium was the responsibility of the Federal Ministry of the Environment as well as its comparable ministries in the two separate regions of the country, Flanders and Wallonia.

Individual companies assumed the responsibility of environmental protection in their own areas of concern. For example, the Cockerill Sambre Group reported in its annual report for 1994 that, during that year, it had put aside BEF1.3 billion (\$37 million)² for improving various aspects of the environment and the Government of Wallonia agreed to a 15% subsidy to support a BEF3 billion (\$85 million) environmental investment program covering the next several years. These investments included improving the treatment of oil effluent from the four-stand tandem mill at Tilleur and drastically reducing air emissions at the Seraing coking plant by using a sealed housing for charging. As is true of most of the large corporations based in Belgium, Cockerill Sambre was an international organization and the environmental policies of the parent applied to the subsidiaries. In the Netherlands, Cockerill Sambre embarked on a major program to cut down on environmental pollution from chemical waste from the Devente paint line; in Germany, Ymos A.G. invested in a new nonchemical metal cleaning plant and was the first company in Germany to carry out an eco-audit.

Production

Production of mineral commodities generally remained stable or increased somewhat in Belgium during 1994. Increases in production generally followed the lines of exported goods, such as value-added nonferrous metals. During 1994, output of hot-rolled steel products increased by 13% compared with 1993; refined lead output increased by 6%; and refined copper and zinc outputs increased by 2% each. As an importer and processor of raw materials, Belgium, in 1994 as in other years, was not able to afford to increase the value added to these imported raw materials to an extent that the prices became uncompetitive on the

international market; the Government and industry have worked together to try to limit social costs to industry. (See table 1.)

Trade

International trade data for Belgium were covered in the context of the BLEU, and as such also contain the exports, reexports, and imports of Luxembourg. Although detailed trade data have not been available to the USBM for several years, little changed in 1994 compared with prior years. Other members of the EU continued to be the most important trading partners. In 1993, principal destinations for all products of the BLEU, based on value, were Germany (20.4% of the total), France (18.5%), the Netherlands (10.3%), the United Kingdom (9.0%), Italy (6.4%), other EU members (5.5%), the United States (5.1%), Japan (1.3%), and rest of the world (23.5%). For imports in 1993, principal sources were, based on value, Germany (22.8% of the total), France (16.9%), the Netherlands (13.0%), the United Kingdom (9.5%), the United States (6.5%), Italy (4.9%), other EU members (3.6%), Japan (3.2%), and the rest of the world (19.6%).

Structure of the Mineral Industry

Table 3 shows the principal plants with their locations and capacities of mineral industry concerns in Belgium. The only mining operations left in Belgium in 1994 were in the production of sand and gravel and the quarrying of stone. The metal processing sector of the industry used principally imported raw materials, whether metal concentrates, scrap, or other materials for smelting and refining or metal for forming and casting. For example, Belgium produced no primary aluminum and only a small quantity of secondary aluminum, but annually produces more than 300,000 metric tons (mt) of aluminum semimanufactures in the form of wire, rods, bars, sections, plate, sheet, and strip. The sand and gravel and stone industries principally supplied the domestic market and neighboring countries, with exports of some of the less common types of stone, such as marbles and the Belgian blue-grey limestone called "petit-granit," to worldwide destinations.

Commodity Review

Metals

Cobalt.—Union Miniere (UM), based in Brussels and a major component in the international supply/demand formula for cobalt, announced a departure from its traditional position as a producer of cobalt special products, such as powders and chemicals, to that of a producer of refined cobalt as well. The main feedstock for the special products had been refined metal, much of which had to be purchased on the world market. UM built a cobalt/nickel refinery based on solvent extraction in the late 1980's and, in an effort to secure a raw

material supply for its production of special products, increased the capacity of the plant to 1,200 metric tons per year (mt/a) in 1994. The company announced plans to further increase capacity to 1,600/to/1,800 mt/a by 1996. The upgraded facility was equipped to process a variety of materials, from low-grade cobalt metal to a variety of cobalt-bearing scraps and residues, including both old scrap and new scrap of metals processing and chemical plants. UM also developed a hydro-metallurgical process for processing zinc cement, a byproduct of zinc refining, that provided an ecologically sound alternative to the stockpiling of the material, the usual means of disposal in the past because of no economically viable alternative. Vast supplies of this cobalt-bearing (less than 10% cobalt) zinc slag occur not only in western Europe, but worldwide.

Copper.—In a continuing effort to modernize its operations, UM announced plans to replace a major part of its copper refinery at Olen in northern Belgium with a new facility, probably by 1997. The new plant would have a workforce of 100 to 200 persons less than the current 1,600 and would have a capacity of 200,000 mt/a, lower than both the existing "useful" capacity of 270,000 mt/a and the nominal capacity of 330,000 mt/a of the existing plant. The company announced, however, that part of the old facility could be maintained to make up any shortfall in output from the new facility.

Steel.—Late in 1994, Belgium's largest steel group, Cockerill Sambre SA, acquired the German steel concern EKO Stahl GmbH, the largest steel plant in what was the former German Democratic Republic (GDR). acquisition of this steel plant, in the German state of Brandenburg on the border with Poland, not only was expected to give Cockerill Sambre ready access to the important domestic steel market in the eastern states of Germany, but also to that of the nations of eastern Europe, a market expected to expand in the near future. The contract for the acquisition of EKO Stahl included the installation of a hot-rolling mill, which had been lacking at the plant, an upgrade of the plant's cold-rolling line, and the installation of a new blast furnace. The new blast furnace would allow the company to produce 1.5 million metric tons per year (Mmt/a) of raw steel, boosting Cockerill Sambre's total capacity to 6.5 Mmt/a. When the additions and modernization are completed, slated for 1998, EKO Stahl would be an integrated steel plant. In the agreement with the Treuhandanstalt, the agency responsible for privatizing concerns in the former GDR, Cockerill Sambre acquired 60% of EKO Stahl, effective January 1, 1995, and the successor of the Treuhandanstalt retained 40%. However, Cockerill Sambre was granted the option to acquire the remaining 40% at any time, but the German agency could not exercise its right to sell the 40% before December 31, 1999.

Belgium's second largest steel group, Sidmar N.V., also ventured into the German steel industry in 1994 by acquiring a majority stake in Stahlwerke Bremen GmbH, the former

Klöckner Stahl GmbH. Stahlwerke Bremen, on the Weser River about 40 kilometers (km) from the North Sea, was an integrated company with a 3.4 Mmt/a capacity. The agreement called for the formation of a common sales organization for the two companies, a substantial increase in sales by Stahlwerke Bremen of hot-rolled products, and an equivalent increase in sales by Sidmar of cold-rolled products.

Zinc.—UM, following its corporate decision to trim zinc operations, closed its zinc refinery at Overpelt and canceled plans to double the capacity at its zinc refinery at Balen. In addition, in 1994, UM sold its zinc mines and refinery in the United States, the Tennessee-based Union Mines, and offered for sale, but then withdrew because of poor economic conditions, its Swedish zinc mining subsidiary, Ammeberg Mining Corp. Proceeds from the sale of these two subsidiaries was slated to help finance the new copper refinery at Olen and the group's copper smelter and precious metals plant at Hoboken. The mines in Sweden covered 15% of the Belgian refinery's concentrate requirements, with the remainder being supplied through long- or medium-term contracts, while purchases on the spot market were made only when required to fill demand.

Industrial Minerals

Diamond.—Belgium, specifically Antwerp, retained its position in 1994 as the world's leading diamond center and reported a turnover of diamonds valued at \$18.5 billion, a 7.8% increase from that of 1993. The diamond industry contributed more than \$2 billion to the Nation's economy, as reported in Diamond International, No. 35, May-June 1995. Exports and reexports of unworked diamonds by Belgium to the United States increased in terms of carat weight in 1994 by 41% compared with the previous year and increased in value by 19%. Exports and reexports of worked diamonds to the United States in 1994 decreased in carat weight by 4% but increased in value by 2%, and per-carat value increased by 6%, indicating larger, more valuable stones being imported by the United States. A noteworthy aspect of Belgium's diamond trade in 1994 was a -14.5% decrease in unworked stones imported from Russia, coupled with an 34.6% increase in the value of the stones, indicating a higher grade of diamond. Imports from Russia of worked stones increased by 10.6%, but the increase in value did not match that of the carat weight, rising only 7.3%. Belgium's international trade in diamonds for 1992-94 is shown in tables 4 and 5.

Mineral Fuels

When the last coal mines in Belgium closed in 1992, the country became entirely dependent on imported primary energy and the only energy-related production in the country was that of refining imported crude petroleum. Once a major producer of coal, Belgium became an importer of coal to

meet the needs of the steel, cement, and power-generating industries. Coal provided about 25% of Belgium's energy needs, but has been losing ground to natural gas. Natural gas was more environmentally acceptable as a fuel and Belgium was at the center of the European gas grid. Distrigaz, the organization that held exclusive rights for the transit and distribution of natural gas in Belgium, began playing an increasingly important role in the overall gas distribution system in Europe. Zeebrugge was the landing point for the Norwegian gas pipeline Zeepipe and was also a port capable of handling liquefied natural gas (LNG). Natural gas from the Netherlands was also transshipped through Belgium to customers in France; Distrigaz also transported Norwegian gas via Germany and the Netherlands to France. A new pipeline was built linking Zeebrugge would the French city of Blaregnies, forming a distribution link that will eventually allow the shipment of Norwegian gas to Spain. Approval was granted for a new pipeline linking Zeebrugge with Bacton in the United Kingdom. A planned pipeline linking Zeebrugge with the German grid near Aachen would not only increase the flow of gas to and from Germany, but would also provide access to the gas grids of eastern Europe and to Russian supplies. Domestic gas consumption in Belgium was about 11 billion cubic meters (m³) in 1994, while transited gas was nearly 15 billion m³; both were expected to grow as the infrastructure expanded for both domestic consumption and transshipment.

Reserves

Belgium had no economically exploitable reserves of metal ores or primary energy. The only mining in the country was the production of sand and gravel and the quarrying of some stone, principally specialty marbles and the Belgian bluegrey limestone called "petit granit." Other than scrap generated domestically, almost all raw materials for the minerals industry must now be imported.

Infrastructure

In 1994, the Belgian National Railways (SNCB) operated 3,568 km of 1.435-meter (m) standard-gauge track, 2,563 km double track, and 2,207 km electrified, all Governmentowned. The country had a total of 137,876 km of roadways, of which 129,603 km were paved (1,631 km is limited access, divided highways) and 8,273 km were unpaved roads. The inland waterway system consisted of 2,043 km, of which about 1,528 km were in regular use. There was 1,167 km of pipelines for petroleum products, 161 km for crude petroleum, and 3,300 km for natural gas. The principal ports were Antwerp, Brugge, Ghent, Oostende, and Zeebrugge. In 1994, the merchant marine consisted of 21 ships of 1,000 gross weight tons or more totaling 36,200 gross weight tons, which included 9 cargo ships, 5 chemical tankers, 5 petroleum tankers, 1 liquefied gas tanker, and 1 bulk carrier.

Outlook

The economic outlook for Belgium for the next few years as of yearend 1994 looked more positive than in the past few years. Corporate restructuring and Government policies of budget cuts, split among the federal Government and the regional authorities of Franders and Wallonia, were expected to make Belgian products more competetive on the world market. The Belgian export-oriented economy relied heavily on the markets of its trading partners, but as corporate profits and cash flow improve and increase, it was expected that domestic demand would equal, if not surpass, exports as the driving force for the economy.

LUXEMBOURG

Luxembourg's mineral industry consisted principally of processing raw materials and was dominated by the steel company ARBED S.A., part of the ARBED Group of companies with interests in steelmaking and products, cement, copper foil production, engineering and steel construction, mining, information systems, and trading, among others. Since its creation in 1882, ARBED has been the largest industrial group in the Grand Duchy of Luxembourg. The steel group had a turnover of \$2.7 billion in 1993, the latest year for which the USBM had data, compared with the turnover of \$2.8 billion in 1992. It recorded a loss of \$165 million in 1993 compared with a loss of \$103 million in 1992. Steel production in the group's European and Brazilian steel companies rose, however, by almost 10% in 1993 to 7.8 Mmt.

Production

Luxembourg's mineral industry was dominated by the steel company ARBED, which produced pig iron from imported iron ore, crude steel, and stainless steel, and was involved in many other areas of the economy, such as the cement and brickmaking industries. The country also has traditionally produced sand and gravel and crushed and dimension stone, but data on the actual production of these materials have not been published since the 1987 production year. However, national statistics indicate that about 0.2% of the national work force (or about 400 persons) was engaged in the extraction of nonmetallic minerals and produced products valued at about \$30 million.

Trade

As a member of the BLEU, trade statistics for Luxembourg are inextricably linked with those of Belgium, and therefore are not able to be listed individually.

Structure of the Mineral Industry

Luxembourg's principal producers of mineral industry products are shown in table 7.

Commodity Review

The iron and steel sector remained the most important industrial sector of the economy. Steel production in Luxembourg remained below that of several years ago, but that was not seen as a problem since production can be tailored to demand, which has been low in the recent past.

Infrastructure

Luxembourg is a landlocked country with 272 km of 1.435-m standard-gauge, 178 km double track, and 197 km electrified railways operated by the Luxembourg National Railways (CFL). The country had a total of 5,108 km of roadways; 4,995 km paved; 57 km gravel; and 56 earth. A pipeline of 48 km delivered petroleum refinery products. The only waterway is the Moselle River, of which 37 km in Luxembourg was navigable, and the only river port was Mertert. In 1994, the merchant marine fleet consisted of 50 ships of 1,000 gross weight tons or more, totaling 1,477,998 gross weight tons. The fleet had nine liquefied gas tankers, eight bulk carriers, six combination bulk carriers, five petroleum tankers, four container ships, four roll-on-roll-off carriers, four chemical tankers, four refrigerated cargo ships, two combination ore/oil carriers, two cargo ships, and two passenger carriers.

Major Sources of Information

Administration des Mines, Ministere des Affaires

Economiques (Administration of Mines, Ministry of Economic Affairs)

Brussels, Belgium.

Institute National des Industries Extractives (National Institute of Extractive Industries)

Liege, Belgium.

Service Geologique de Belgique (Belgian Geological Service)

Brussels, Belgium.

Service Central de la Statistiques et des EtudesEconomiques (STATEC) (Central Statistical and Economic Studies Service) Luxembourg, Luxembourg.

Major Publications

Annales des Mines de Belgique: Administration des Mines (Annals of Mines: Administration of Mines)

Brussels, Belgium, biannual.

Bulletin de Statistiques: Institute National de Statistique (Statistical Bulletin: National Institute of Statistics) Brussels, Belgium, monthly.

Statistiques Industrielles: Institute National de Statistique (Industrial Statistics: National Institute of Statistics)

¹Text prepared July 1995.

 $^{^{2}}$ When necessary, Belgian francs (BEF) were converted to US dollars at the rate of BEF35.456 = US\$1.00.

Brussels, Belgium, monthly.

Statistiques du Commerce Interieur and des Transports:Institute National de Statistiques (Statistics of Interior Commerce and Transport: National Institute of Statistics)

Brussels, Belgium, monthly.

Diamond International, London, United Kingdom, various issues.

Annuaire Statistique (Annual Statistics), STATEC, Luxembourg, Luxembourg.

Bulletin de Statec, STATEC, Luxembourg, Luxembourg, monthly.

Indicateurs Rapides (Rapid Indicators), STATEC, Luxembourg, Luxembourg.

$\label{table 1} \textbf{TABLE 1} \\ \textbf{BELGIUM: PRODUCTION OF MINERAL COMMODITIES 1}/$

(Metric tons unless otherwise specified)

Commodity 2/ METALS Aluminum, secondary including unspecified metals Arsenic, white e/ Bismuth, metal e/ Cadmium, primary Cobalt, primary Copper: Blister: e/ Primary Secondary Total	7,390 2,500 800 r/ 1,810	7,000 e/ 2,000 800 r/ 1,550	1993 4,000 e/ 2,000 950 r/ 1,570	1994 4,000 e/ 2,000 950 1,560 1,200 e/
Aluminum, secondary including unspecified metals Arsenic, white e/ Bismuth, metal e/ Cadmium, primary Cobalt, primary Copper: Blister: e/ Primary Secondary Total	2,500 800 r/ 1,810 	2,000 800 r/ 1,550	2,000 950 r/	2,000 950 1,560
Arsenic, white e/ Bismuth, metal e/ Cadmium, primary Cobalt, primary Copper: Blister: e/ Primary Secondary Total	2,500 800 r/ 1,810 	2,000 800 r/ 1,550	2,000 950 r/	2,000 950 1,560
Bismuth, metal e/ Cadmium, primary Cobalt, primary Copper: Blister: e/ Primary Secondary Total	800 r/ 1,810	800 r/ 1,550	950 r/	950 1,560
Cadmium, primary Cobalt, primary Copper: Blister: e/ Primary Secondary Total	1,810	1,550		1,560
Cobalt, primary Copper: Blister: e/ Primary Secondary Total	1,000	<u></u>		,
Copper: Blister: e/ Primary Secondary Total				
Blister: e/ Primary Secondary Total				
Primary Secondary Total				
Secondary Total		800	800	800
Total	105,000	102,000	102,000	103,000
TI 1 1 C 1	106,000	103,000	103,000	103,000
Unwrought, total of smelter and refined, primary and				
secondary, including alloys	478,756 r/	471,985 r/	455,235 r/	468,000 e/
Refined, primary and secondary including alloys	297,593 r/	367,318 r/	378,890 r/	371,152 r/
Iron and steel:				
Pig iron	9,354,000 r/	8,524,000 r/	8,178,000 r/	9,030,000
Ferroalloys: Electric furnace ferromanganese e/	25,000	25,000	25,000	25,000
Steel:				
Crude	11,334,883 r/	10,337,352 r/	10,172,000 r/	11,319,000 r/
Hot-rolled products	10,800,000	10,300,000	9,750,000 r/	11,000,000
Lead:				
Smelter:				
Primary e/ 3/	69,800	75,400	76,000	76,000
Secondary 4/	21,200 r/	19,700 r/	25,400 r/	25,500 e/
Total e/	91,000 r/	95,100 r/	101,000 r/	102,000
Refined:				
Primary	89,484 r/	96,597 r/	105,712 r/	97,200 r/
Secondary	21,200 r/	19,700 r/	25,400 r/	26,300 r/
Total	110,684 r/	116,297 r/	131,112 r/	123,500 r/
Selenium e/	250	250	250	250
Tin metal, secondary including alloys	4,430	5,260 e/	5,000 e/	5,000 e/
Zinc:				
Slab:				
Primary	297,600 r/	217,200 r/	209,600 r/	211,200 r/
Secondary (possibly remelted zinc) e/	87,000	93,400	90,000	95,000
Total	384,200 r/	310,600 r/	299,600 r/	306,200 r/
Powder	52,400	43,700	37,700 r/	40,000 e/
INDUSTRIAL MINERALS				
Barite e/	35,000	30,000	30,000	30,000
Cement, hydraulic	7,180,000	8,070,000	7,570,000 r/	8,000,000 e/
Clays: Kaolin	260,000	325,000 e/	300,000 e/	300,000 e/
Lime and dead-burned dolomite: Quicklime	2,020,000	1,870,000	1,750,000 e/	1,750,000 e/
Nitrogen: N content of ammonia	272,000	514,000 r/	535,000 r/	500,000 e/
Sodium compounds:				
Soda ash	380,000 e/	375,000 e/	375,000 e/	
Sulfate e/	260,000	250,000	250,000	250,000
Stone, sand and gravel:				
Calcareous:				
Dolomite	4,030,000	3,980,000	4,000,000 e/	4,000,000 e/
Limestone	34,300,000	33,400,000	33,400,000 e/	33,500,000 e/
Marble:				
In blocks cubic meters	358	232	250 e/	250 e/
Crushed and other	80	80 e/	80 e/	80 e/
Petit granite (Belgian bluestone):				
Quarried cubic meters	864,000	1,210,000	1,200,000 e/	1,200,000 e/
Sawed do.	67,700	90,000 e/	90,000 e/	90,000 e/
	12,000	15,000 e/	15,000 e/	15,000 e/
Worked do.	599,000	800,000 e/	800,000 e/	800,000 e/
Crushed and other do.			4,000,000 e/	4,000,000 e/
Crushed and other do. Porphyry, all types	3,970,000	4,130,000		
Crushed and other do. Porphyry, all types Quartz and quartzite		4,130,000 500,000 e/	500,000 e/	500,000 e/
Crushed and other do. Porphyry, all types Quartz and quartzite Sandstone:	3,970,000 403,000	500,000 e/	500,000 e/	
Crushed and other do. Porphyry, all types Quartz and quartzite Sandstone: Rough stone including crushed	3,970,000 403,000 2,660,000	500,000 e/ 2,400,000 e/	500,000 e/ 2,400,000 e/	2,400,000 e/
Crushed and other do. Porphyry, all types Quartz and quartzite Sandstone: Rough stone including crushed Paving	3,970,000 403,000	500,000 e/	500,000 e/	
Crushed and other do. Porphyry, all types Quartz and quartzite Sandstone: Rough stone including crushed Paving Sand and gravel:	3,970,000 403,000 2,660,000 14,400	500,000 e/ 2,400,000 e/ 14,000 e/	500,000 e/ 2,400,000 e/ 14,000 e/	2,400,000 e/ 14,000 e/
Crushed and other do. Porphyry, all types Quartz and quartzite Sandstone: Rough stone including crushed Paving Sand and gravel: Construction sand	3,970,000 403,000 2,660,000 14,400 9,160,000	500,000 e/ 2,400,000 e/ 14,000 e/ 9,200,000 e/	500,000 e/ 2,400,000 e/ 14,000 e/ 9,200,000 e/	2,400,000 e/ 14,000 e/ 9,200,000 e/
Crushed and other do. Porphyry, all types Quartz and quartzite Sandstone: Rough stone including crushed Paving Sand and gravel:	3,970,000 403,000 2,660,000 14,400	500,000 e/ 2,400,000 e/ 14,000 e/	500,000 e/ 2,400,000 e/ 14,000 e/	2,400,000 e/ 14,000 e/

TABLE 1--Continued BELGIUM: PRODUCTION OF MINERAL COMMODITIES 1/2/

(Metric tons unless otherwise specified)

INDUSTRIAL MINERALS - Continued Sand and gravel - Continued Class sand 2,070,000 1,950,000 e/ 2,800,000 e/ 3,000,000 e/ 3,000						
Sand and gravel—Continued: 2,070,000 1,950,000 e/ 1,950,000 e/ 1,950,000 e/ 2,800,000 e/ 3,800,000 300,000 300,000 f/ 160,000 f/ 160,000 f/ 140,000 f/ 300,000 f/			1991	1992	1993	1994
Glass sand						
Other sand 2,790,000 2,800,000 e/ 5,000,000 e/ 1,000,000 e/ 1,000 e/ 1,000 e/ 1,000 e/ 1,000 e/ 2,000,000 e/ 2,0	Sand and gravelContinued:					
Gravel, dredged 4,190,000 4,900,000 5,000,000 e/ 5,000,000 5000,0	Glass sand		2,070,000	1,950,000 e/	1,950,000 e/	1,950,000 e/
Sulfur: e/ Byproduct:	Other sand		2,790,000	2,800,000 e/	2,800,000 e/	2,800,000 e/
Byproduct: Elemental	Gravel, dredged		4,190,000	4,900,000	5,000,000 e/	5,000,000 e/
Elemental	Sulfur: e/					
Other forms 140,000 140,000 140,000 140,000 140,000 140,000 140,000 100,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 200,000 200,000 200,000 200,000 200,000 200,000 200,000 200,000 2,000,000 2,000,000 2,000,000 2,000,000 2,000,000 1,700 2,500,000	Byproduct:					
Total 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 2000,000 2000,000 2000,000 2000,000 2000,000 2000,000 2000,000 2000,000 1,700 2,500,00	Elemental		160,000	160,000	160,000	160,000
Sulfuric acid, oleum 1,940,000 1,910,000 2,000,000 e/ 2,000,00 MINERAL FUELS AND RELATED MATERIALS 1,700 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000	Other forms		140,000	140,000	140,000	140,000
MINERAL FUELS AND RELATED MATERIALS 1,700 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 2,500,000 550,000 550,000 550,000 550,000 550,000 550,000 550,000 6,690 4,000 e/	Total		300,000	300,000	300,000	300,000
Carbon black e/ 1,700 2,500,000 200,000 2,500,000 7/200,000 2,500,000 7/200,000 2,500,000 7/200,000 2,500,000 7/200,000 550,000 550,000 550,000 550,000 550,000 550,000 550,000 550,000 550,000 550,000 550,000 550,000 550,000 550,000 550,000 550,000 550,000 600 11,000 e/ 7,500 e/	Sulfuric acid, oleum	<u> </u>	1,940,000	1,910,000	2,000,000 e/	2,000,000 e/
Coal, bituminous 636,000 226,000 Coke, all types 4,890,000 2,690,000 2,500,000 r/e/ 2,500,000 Gas: Manufactured thousand cubic meters 565,000 551,000 550,000 e/ 550,00 Marketable do. 11,000 e/ 7,500 e/ Petroleum refinery products: Liquefied petroleum gas thousand 42-gallon barrels 5,310 4,330 4,620 r/ 5,90 Aviation gasoline do. 12,200 8,600 e/ 9,200 e/ 9,20 Gasoline do. 50,000 52,400 47,700 r/ 48,50 Jet fuel do. 12,400 13,700 12,100 r/ 13,20 Kerosene do. 690 566 597 50 Distillate fuel oil do. 81,900 80,500 79,800 r/ 85,10 Refinery gas do. 3,810 3,500 e/	MINERAL FUELS AND RELATED MATERIALS					
Coke, all types 4,890,000 2,690,000 2,500,000 r/e/ 2,500,000 Gas: Manufactured thousand cubic meters 565,000 551,000 550,000 e/ 550,00 Gross do. 11,000 e/ 7,500 e/ Marketable do. 6,690 4,000 e/ Petroleum refinery products: Liquefied petroleum gas thousand 42-gallon barrels 5,310 4,330 4,620 r/ 5,93 Aviation gasoline do. 12,200 8,600 e/ 9,200 e/ 9,20 Gasoline do. 12,400 13,700 12,100 r/ 48,50 Jet fuel do. 690 566 597 50 Kerosene do. 81,900 80,500 79,800 r/ 85,10 Refinery gas do. 3,810 3,500 e/ 3,500 e/ 3,500 e/ Residual fuel oil do. 48,500 44,800 43,900 r/ 37,60 Petroleum refinery products: Bitumen do. 5,0	Carbon black e/		1,700	1,700	1,700	1,700
Gas: Manufactured thousand cubic meters 565,000 551,000 550,000 e/	Coal, bituminous		636,000	226,000	· 	
Manufactured thousand cubic meters 565,000 551,000 550,000 e/ 550,000 e/ Natural (byproduct of coalmining): ado. 11,000 e/ 7,500 e/ Marketable do. 6,690 4,000 e/ Petroleum refinery products: Liquefied petroleum gas thousand 42-gallon barrels 5,310 4,330 4,620 r/ 5,920 Aviation gasoline do. 12 Naphtha and white spirit do. 12,200 8,600 e/ 9,200 e/ 9,20 Gasoline do. 50,000 52,400 47,700 r/ 48,50 Jet fuel do. 690 566 597 56 Kerosene do. 690 566 597 56 Distillate fuel oil do. 3,810 3,500 e/ 3,500	Coke, all types		4,890,000	2,690,000	2,500,000 r/e/	2,500,000 e/
Natural (byproduct of coalmining): Gross do. 11,000 e/ 7,500 e/ Marketable do. 6,690 4,000 e/ Petroleum refinery products: Liquefied petroleum gas thousand 42-gallon barrels 5,310 4,330 4,620 r/ 5,930 Aviation gasoline do. 12 Naphtha and white spirit do. 12,200 8,600 e/ 9,200 e/ 9,200 e/ 9,200 e/ Gasoline do. 50,000 52,400 47,700 r/ 48,500 Jet fuel do. 12,400 13,700 12,100 r/ 13,200 Kerosene do. 690 566 597 500 Distillate fuel oil do. 81,900 80,500 79,800 r/ 85,100 Refinery gas do. 3,810 3,500 e/ 3,500 e/ 3,500 e/ Residual fuel oil do. 48,500 44,800 43,900 r/ 37,600 Petroleum refinery products: Bitumen do. 5,060 4,000 e/ 4,000 e/ 4,000 e/ Other e/ do. 10,000 8,500 8,500 8,500 8,500 Refinery fuel and losses do. 12,000 12,300 11,700 12,000	Gas:					
Gross do. 11,000 e/ 7,500 e/ <td>Manufactured thousand</td> <td>d cubic meters</td> <td>565,000</td> <td>551,000</td> <td>550,000 e/</td> <td>550,000 e/</td>	Manufactured thousand	d cubic meters	565,000	551,000	550,000 e/	550,000 e/
Marketable do. 6,690 4,000 e/ Petroleum refinery products: Liquefied petroleum gas thousand 42-gallon barrels 5,310 4,330 4,620 r/ 5,930 Aviation gasoline do. 12 Naphtha and white spirit do. 12,200 8,600 e/ 9,200 e/ 9,20 Gasoline do. 50,000 52,400 47,700 r/ 48,50 Jet fuel do. 12,400 13,700 12,100 r/ 13,20 Kerosene do. 690 566 597 50 Distillate fuel oil do. 81,900 80,500 79,800 r/ 85,10 Residual fuel oil do. 48,500 44,800 43,900 r/ 37,60 Petroleum refinery products: 8 8 5,060 4,000 e/	Natural (byproduct of coalmining):	<u> </u>				
Petroleum refinery products: Liquefied petroleum gas thousand 42-gallon barrels 5,310 4,330 4,620 r/ 5,930 Aviation gasoline do. 12 Naphtha and white spirit do. 12,200 8,600 e/ 9,200 e/ 9,200 g/ 9,	Gross	do.	11,000 e/	7,500 e/		
Liquefied petroleum gas thousand 42-gallon barrels 5,310 4,330 4,620 r/ 5,920 Aviation gasoline do. 12 Naphtha and white spirit do. 12,200 8,600 e/ 9,200 e/ 9,20 Gasoline do. 50,000 52,400 47,700 r/ 48,50 Jet fuel do. 12,400 13,700 12,100 r/ 13,20 Kerosene do. 690 566 597 56 Distillate fuel oil do. 81,900 80,500 79,800 r/ 85,10 Residual fuel oil do. 48,500 44,800 43,900 r/ 37,60 Petroleum refinery products: Bitumen do. 5,060 4,000 e/ 4,0	Marketable	do.	6,690	4,000 e/		
Aviation gasoline do. 12 Naphtha and white spirit do. 12,200 8,600 e/ 9,200 e/ 9,20 Gasoline do. 50,000 52,400 47,700 r/ 48,50 Jet fuel do. 12,400 13,700 12,100 r/ 13,20 Kerosene do. 690 566 597 56 Distillate fuel oil do. 81,900 80,500 79,800 r/ 85,10 Refinery gas do. 3,810 3,500 e/	Petroleum refinery products:					
Naphtha and white spirit do. 12,200 8,600 e/ 9,200 e/ 9,20 Gasoline do. 50,000 52,400 47,700 r/ 48,50 Jet fuel do. 12,400 13,700 12,100 r/ 13,20 Kerosene do. 690 566 597 5 Distillate fuel oil do. 81,900 80,500 79,800 r/ 85,10 Refinery gas do. 3,810 3,500 e/ 3,500 e/ 3,500 e/ 3,500 e/ 3,500 e/ 37,60 Petroleum refinery products: Bitumen do. 5,060 4,000 e/ 12,000 8,500 8	Liquefied petroleum gas thousand 42-	gallon barrels	5,310	4,330	4,620 r/	5,930
Naphtha and white spirit do. 12,200 8,600 e/ 9,200 e/ 9,20 Gasoline do. 50,000 52,400 47,700 r/ 48,50 Jet fuel do. 12,400 13,700 12,100 r/ 13,20 Kerosene do. 690 566 597 5 Distillate fuel oil do. 81,900 80,500 79,800 r/ 85,10 Refinery gas do. 3,810 3,500 e/ 3,500 e/ 3,500 e/ 3,500 e/ 3,500 e/ 37,60 Petroleum refinery products: Bitumen do. 5,060 4,000 e/ 12,000 8,500 8	Aviation gasoline	do.	12	·	· 	
Jet fuel do. 12,400 13,700 12,100 r/ 13,20 Kerosene do. 690 566 597 56 Distillate fuel oil do. 81,900 80,500 79,800 r/ 85,10 Refinery gas do. 3,810 3,500 e/ 3,500 e/ 3,500 e/ 3,500 e/ 3,500 e/ 37,60 Petroleum refinery products: Bitumen do. 5,060 4,000 e/ 12,000 8,500 <td< td=""><td></td><td>do.</td><td>12,200</td><td>8,600 e/</td><td>9,200 e/</td><td>9,200 e/</td></td<>		do.	12,200	8,600 e/	9,200 e/	9,200 e/
Kerosene do. 690 566 597 56 Distillate fuel oil do. 81,900 80,500 79,800 r/ 85,10 Refinery gas do. 3,810 3,500 e/ 3,500 e/ 3,500 e/ 3,500 e/ 3,500 e/ 3,500 e/ 37,60 Petroleum refinery products: Bitumen do. 5,060 4,000 e/ 4,000 e/ 4,000 e/ 4,000 e/ 4,000 e/ 4,000 e/ 8,500<	Gasoline	do.	50,000	52,400	47,700 r/	48,500
Distillate fuel oil do. 81,900 80,500 79,800 r/ 85,10 Refinery gas do. 3,810 3,500 e/ 37,60 Petroleum refinery products: Bitumen do. 5,060 4,000 e/ 8,500 8,500 8,500 8,500 8,500 11,700 12,000 12,300 11,700 12,0	Jet fuel	do.	12,400	13,700	12,100 r/	13,200
Refinery gas do. 3,810 3,500 e/ 4,000 e/ <th< td=""><td>Kerosene</td><td>do.</td><td>690</td><td>566</td><td>597</td><td>566</td></th<>	Kerosene	do.	690	566	597	566
Residual fuel oil do. 48,500 44,800 43,900 r/ 37,60 Petroleum refinery products: Bitumen do. 5,060 4,000 e/ 4,000 e/ 4,000 e/ 4,000 e/ 4,000 e/ 4,000 e/ 8,500 8,500 8,500 8,500 8,500 11,700 12,000 12,300 11,700 12,000	Distillate fuel oil	do.	81,900	80,500	79,800 r/	85,100
Residual fuel oil do. 48,500 44,800 43,900 r/ 37,60 Petroleum refinery products: Bitumen do. 5,060 4,000 e/ 4,000 e/ 4,000 e/ 4,000 e/ 4,000 e/ 4,000 e/ 8,500 8,500 8,500 8,500 8,500 11,700 12,000 12,300 11,700 12,000	Refinery gas	do.	3,810	3,500 e/	3,500 e/	3,500 e/
Bitumen do. 5,060 4,000 e/ 8,500 8,500 8,500 8,500 8,500 8,500 11,700 12,000 12,300 11,700 12,000 <t< td=""><td>Residual fuel oil</td><td>do.</td><td>48,500</td><td>44,800</td><td>43,900 r/</td><td>37,600</td></t<>	Residual fuel oil	do.	48,500	44,800	43,900 r/	37,600
Bitumen do. 5,060 4,000 e/ 8,500 8,500 8,500 8,500 8,500 8,500 11,700 12,000 12,300 11,700 12,000 <t< td=""><td>Petroleum refinery products:</td><td></td><td>•</td><td>•</td><td>•</td><td>ŕ</td></t<>	Petroleum refinery products:		•	•	•	ŕ
Other e/ do. 10,000 8,500 8,500 8,500 Refinery fuel and losses do. 12,000 12,300 11,700 12,00		do.	5,060	4,000 e/	4,000 e/	4,000 e/
Refinery fuel and losses do. 12,000 12,300 11,700 12,00				8,500	,	8,500
	Refinery fuel and losses		,	,		12,000 e/
10tal e/ do. 242,000 r/ 233,000 r/ 226.000 r/ 228.00	Total e/	do.	242,000 r/	233,000 r/	226,000 r/	228,000

e/ Estimated. r/ Revised.

 $^{1/\,\}text{Table}$ includes data available to the U.S. Bureau of Mines through June 1996.

^{2/} In addition to the commodities listed, Belgium produced a number of other metals and alloys for which only aggregate output figures were available.

^{3/} Data not reported; derived by taking reported total lead output plus exports of lead bullion less imports of lead bullion.

^{4/} Data represent secondary refined lead output less remelted lead; as such, the figures are probably high because they include some lead that was sufficiently pure as scrap that it did not require resmelting, but data are not adequate to permit differentiation.

^{5/} Includes gold, platinum-group metals, and silver.

TABLE 2 BELGIUM: PRODUCTION, CONSUMPTION, AND IMPORT DEPENDENCE OF SELECTED NONFERROUS METALS

(Thousand metric tons and percent)

Metal	1991	1992	1993
Aluminum, primary			
Production			
Consumption	323.0	291.8	270.0
Import dependence, percent	100.0	100.0	100.0
Copper, refined			
Production	297.6	306.2	336.0
Consumption	372.0	371.8	320.0
Import dependence, percent	20.0	17.6	net export
Lead, refined			
Production	99.3	98.9	116.8
Consumption	71.7	64.1	74.0
Import dependence, percent	net export	net export	net export
Nickel,smelter			
Production			
Consumption	19.6	21.4	22.8
Import dependence, percent	100.0	100.0	100.0
Tin, smelter			
Production			
Consumption	2.6	2.5	2.5
Import dependence, percent	100.0	100.0	100.0
Zinc, metal			
Production	297.6	217.2	209.6
Consumption	200.0	189.0	210.0
Import dependence, percent	net export	net export	

Source: METALLSTATISTIK 1982-1992, Metallgesellschaft AG, Frankfurt am Main, Germany for 1991-92 and WORLD METAL STATISTICS, World Bureau of Metal Statistics, Ware, United Kingdom, v. 48, No. 5, May 1995 for 1993.

TABLE 3 BELGIUM: STRUCTURE OF THE MINERAL INDUSTRY FOR 1994

(Thousand metric tons unless otherwise specified)

Cor	nmodity	Major operating companies and major equity owners	Location of main facilities	Annual
Cadmium, metal	tons	Vieille-Montagne NV	Balen-Wezel	capacity 1.550
Do.	do.	NV Metallurgie Hoboken-Overpelt SA	Overpelt	1,550
D0.	uo.	(NV MHO SA)	Overpeit	600
Cement		Major companies:		8,400
Do.		Cimenteries CBR SA (Societe Generale de	Plants at Lixhe, Mons/Obourg,	0,100
Во.		Belgique, or SGB)	Harmignies, Marchienne, Ghent,	
		beigique, or bob)	et al.	3,200
Do.		Ciments d'Obourg SA	Plants at Obourg and Thieu	1/2,800
Do.		Compagnie des Ciment	Plant at Gaurain-Ramecroix	1,2,000
ъо.		Belge (Ciments Français)	Thank at Gaurani Rameeroix	2,400
Copper		Metallurgie Hoboken-Overpelt SA	Smelter at Antwerp-Hoboken	50
Соррег		(Union Minière SA- 58/37%)	Refinery at Olen	330
Do.		Metallo-Chimique NV	Smelter at Beerse	80
Dolomite		Carsambre SA Dolomeuse	Quarry at Floreffe	300
Do.		do.	Quarry at Marche les Dames	600
		do.	Plant at Namur	37
Do.		SA de Marche les Dames	Quarries at Vezin and Scalaigneaux	31
D0.		SA de Marche les Danies	and Scalaigneaux	300
Do.		do.	Plant at Vezin	35
Do.		SA dews Dolomies de Marche-les-Dames	Quarry at Nameche	300
Do.		do.	Of which	300
Do. Do.		do.	Soft-burned	500
Ъ0.		uo.	Dead-burned	200
Do.		SA Dolomies de Villiers-le-Gambon	Quarry at Villiers-le-Gambon	300
Lead, metal		Metallurgie Hoboken-Overpelt SA	Smelter at Antwerp-Hoboken	90
Lead, metai		(Union Minière	Refinery at Antwerp-Hoboken	125
Petroleum, refined	42-gallon barrels/day	Refineries:	remery at runwerp Hoboken	602,000
Do.	do.	Fina Raffinaderji Antwerp	Refinery at Antwerp	(268,000)
Do.	do.	SA Esso NV	do.	(239,000)
Do.	do.	Belgian Refining Corp.	do.	(80,000)
Do.	do.	Nynas Petroleum NV	do.	(125,000)
Steel:	uo.	Companies:	uo.	14.000
Steel.		Companies.		Of which:
Do.		Cockerill Sambre SA	Plants at Liège and Charleroi	(5,000)
D0.		(Government of Wallonia, 80%)	Tiants at Liege and Charleton	(3,000)
Do.		Sidmar NV (Belgian Government 28.11%;		
D0.		ARBED in Luxembourg, 66.97%)	Plant at Ghent	(3,960)
Do.		Usines Gustave Boël NV	Plant at La Louviere	(2,020)
 Do.		Forges de Clabecq SA	Plant at Clabecq	(1,500)
		SA FAbrique de Fer de Charleroi	Plant at Charleroi	(600)
Do.		ALZ NV	Plant at Genk-Zuid	(360)
		New Tuberneuse (NTW) SA	Plant at Flemalle	(300)
		Vieille-Montagne SA (Union Minière SA)		385
Zinc, metal	v of the commons CA Cime		Smelter at Balen-Wezel	383

1/Includes the capacity of the company SA Ciments de Haccourt.

TABLE 4 BELGIUM: EXPORTS AND REEXPORTS OF DIAMOND

	199	2	199	3	1994	
Destinations	Quantity	Value	Quantity	Value	Quantity	Value
	(carats)	(thousands)	(carats)	(thousands)	(carats)	(thousands)
Sorted, unworked or simply sawn, cleaved, or bruted:						
Hong Kong	629,001	\$44,217	477,509	\$35,538	1,006,262	\$46,125
India	53,749,387	1,117,313	70,000,000	1,600,534	64,068,213	1,577,182
Israel	5,900,172	1,516,278	6,229,748	1,607,974	6,325,339	1,753,183
Malaysia	377,084	61,178	503,912	64,101	433,042	79,825
South Africa, Republic of	65,925	33,504	19,500	50,355	117,316	71,178
Sri Lanka	539,147	76,899	374,532	96,844	608,774	95,938
Switzerland	404,372	10,944	198,640	36,970	272,015	56,414
Thailand	898,454	143,205	121,760	187,035	1,146,364	203,983
Tunisia	30,998	4,949	611,370	2,536	26,971	4,417
United Kingdom	6,119,348	585,850	4,994,308	457,268	4,513,043	528,574
United States	508,033	230,431	444,952	305,256	626,142	362,769
Unspecified	809,961	83,781	1,117,488	108,009	1,216,135	145,847
Total	70,031,882	3,908,549	85,093,719	4,552,420	80,359,616	4,925,435
Worked but not mounted or set:						
Germany	312,968	\$202,109	291,177	\$206,639	274,662	\$206,660
Hong Kong	649,215	499,156	628,371	522,620	767,866	608,939
Israel	305,570	217,631	343,104	239,861	400,191	270,355
Italy	151,852	75,783	183,623	92,023	236,920	119,463
Japan	450,296	502,218	442,993	535,531	454,846	610,170
Switzerland	282,612	251,494	369,696	287,190	500,650	397,461
Thailand	116,186	70,335	196,912	118,347	239,842	161,771
United Kingdom	138,778	104,358	223,098	185,254	196,729	226,120
United States	1,414,597	990,572	1,663,570	1,229,193	1,594,325	1,251,256
Unspecified	716,532	426,728	797,690	498,111	817,094	541,769
Total	4,538,606	3,340,384	5,140,234	3,914,769	5,483,125	4,393,964

Source: Diamond International, July-Aug. 1993, No. 24; Mar.-Apr. 1994, No. 28; and May-June 1995, No. 35, London, United Kingdom.

TABLE 5 BELGIUM: IMPORTS OF DIAMOND

	199	2	199	93	199	1994	
Sources	Quantity	Value	Quantity	Value	Quantity	Value	
	(carats)	(thousands)	(carats)	(thousands)	(carats)	(thousands)	
Natural rough, unsorted, and sorted, unworked or							
simply sawn, cleaved, or bruted:							
Angola	636,812	\$146,825	712,724	\$135,281	689,443	\$132,687	
Australia	8,474,381	60,208	7,932,624	53,214	9,245,275	58,016	
Commonwealth of Independent States 1/	59,880	6,132	1,404,919	48,470	1,201,056	65,253	
Côte d'Ivoire	868,163	88,322	683,691	101,520	605,078	94,051	
Israel	1,285,198	218,260	1,829,278	301,674	1,633,937	339,423	
Liberia	1,909,299	293,704	5,006,234	290,143	3,268,982	394,106	
Sierra Leone	831,366	179,446	344,626	79,637	526,743	107,134	
Switzerland	796,144	45,720	1,447,859	153,544	369,134	58,108	
United Kingdom	24,899,237	1,947,833	38,511,282	2,374,185	19,473,831	2,331,784	
United States	1,133,411	81,343	1,572,907	138,508	1,279,561	127,275	
Zaire	18,907,387	589,438	18,709,867	701,208	17,047,209	940,806	
Unspecified	5,376,045	617,886	6,912,948	702,489	8,964,174	783,305	
Total	65,177,323	4,275,117	85,068,959	5,079,873	64,304,423	5,431,948	
Worked but not mounted or set:							
Commonwealth of Independent States 1/	347,981	\$376,082	389,695	\$399,963	430,950	\$429,124	
Germany	144,809	88,732	112,761	80,396	130,862	87,061	
Hong Kong	304,550	155,800	301,396	178,502	304,382	207,782	
India	1,296,681	425,226	1,754,266	560,059	1,888,913	605,959	
Israel	428,031	383,840	468,803	463,780	460,859	482,312	
South Africa, Republic of	128,845	141,251	109,185	142,333	81,236	120,849	
Sri Lanka	199,477	83,269	247,229	113,874	232,328	108,575	
Switzerland	89,610	122,299	131,777	165,732	105,704	204,182	
Thailand	264,194	124,560	333,893	161,665	395,514	203,806	
United Kingdom	89,838	84,817	118,300	132,571	108,101	149,830	
United States	429,423	356,088	479,240	384,989	483,997	443,815	
Unspecified	530,838	342,769	597,834	431,478	666,320	472,993	
Total	4,254,277	2,684,733	5,044,379	3,215,342	5,289,166	3,516,288	

1/ Since Apr. 1992; formerly U.S.S.R.

Source: Diamond International, July-Aug. 1993, No. 24; Mar.-Apr. 1994, No. 28; and May-June 1995, No. 35, London, United Kingdom.

 ${\bf TABLE~6} \\ {\bf LUXEMBOURG:~PRODUCTION~OF~MINERAL~COMMODITIES~1/~2/} \\$

(Metric tons unless otherwise specified)

Commodity	1990	1991	1992	1993	1994
Cement, hydraulic	635,571	687,786	600,000 r/e/	620,000 r/e/	620,000 e/
Gypsum and anhydrite, crude e/	400	400	400	400	400
Iron and steel: Metal:					
Pig iron	2,645,200	2,463,000	2,256,000	2,411,000	1,927,000
Steel:					
Crude	3,560,290	3,379,440	3,068,463	3,293,000	3,092,000
Semimanufactures	3,950,035	3,787,000	3,590,000	3,650,000	3,620,000
Phosphates: Thomas slag:					
Gross weight	602,877	535,518	519,000	555,000 e/	500,000 e/
P2O5 content	108,518	95,000 e/	93,000 e/	100,000 e/	75,000 e/

e/ Estimated. r/ Revised.

TABLE 7 LUXEMBOURG: STRUCTURE OF THE MINERAL INDUSTRY FOR 1994

(Thousand metric tons)

Commodity	Major operating companies	Location of main facilities	Annual
	and major equity owners		capacity
Cement	SA des Ciments Luxembourgeois	Plant at Esch-sur-Alzette	
	(ARBED, 50%; SGB, 25%)		450
Do.	Intermoselle SARL (ARBED, 33%)	Plant at Rumelange	1,000
Steel	Acieries Reunies de Burbach-Eich-Dudelang	Plants at Differdange,	
	(ARBED) (SGB, 25%; Belgian Government,	Dudelange, Esch-Belval,	
	31%; and others)	and Esch-Schifflange	5,320

^{1/} Previously published and 1994 data are rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

^{2/} Table includes data available to the U.S. Bureau of Mines through June 1995.

^{3/} Construction materials such as dimension stone and sand and gravel are also produced, but the amounts are no longer reported and no basis exists for the formulation of reliable estimates of output levels.